# abcam

# Product datasheet

# Anti-CYB5R3 antibody ab244253

### 3 Images

Overview

Product name Anti-CYB5R3 antibody

**Description** Rabbit polyclonal to CYB5R3

Host species Rabbit

Tested applications Suitable for: IHC-P, ICC/IF, WB

Species reactivity Reacts with: Human

Predicted to work with: Cow, Dog, Pig, Cynomolgus monkey

**Immunogen** Recombinant fragment corresponding to Human CYB5R3 aa 100-300.

Database link: P00387

Run BLAST with
Run BLAST with

Positive control IHC-P: Human testis tissue. ICC/IF: A431 cells. WB: RT4, A431 and U-251 MG cell lysate. Human

liver and tonsil tissue lysate.

**General notes**The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

**Properties** 

Form Liquid

**Storage instructions** Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long

term. Avoid freeze / thaw cycle.

Storage buffer pH: 7.20

Preservative: 0.02% Sodium azide

Constituents: PBS, 40% Glycerol (glycerin, glycerine)

**Purity** Immunogen affinity purified

**Clonality** Polyclonal

**Isotype** IgG

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#### **Applications**

#### The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab244253 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-P		1/1000 - 1/2500. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
ICC/IF		Use a concentration of 0.25 - 2 µg/ml. Fixation/Permeabilization: PFA/Triton X-100.
WB		Use a concentration of 0.04 - 0.4 μg/ml. Predicted molecular weight: 34 kDa.

#### **Target**

**Function** 

Desaturation and elongation of fatty acids, cholesterol biosynthesis, drug metabolism, and, in

erythrocyte, methemoglobin reduction.

Tissue specificity

Isoform 2 is expressed at late stages of erythroid maturation.

Involvement in disease

Defects in CYB5R3 are the cause of methemoglobinemia CYB5R3-related (METHB-CYB5R3) [MIM:250800]. A form of methemoglobinemia, a hematologic disease characterized by the presence of excessive amounts of methemoglobin in blood cells, resulting in decreased oxygen carrying capacity of the blood, cyanosis and hypoxia. There are two types of methemoglobinemia CYB5R3-related. In type 1, the defect affects the soluble form of the enzyme, is restricted to red blood cells, and causes well-tolerated methemoglobinemia. In type 2, the defect affects both the soluble and microsomal forms of the enzyme and is thus generalized, affecting red cells, leukocytes and all body tissues. Type 2 methemoglobinemia is associated with mental deficiency and other neurologic symptoms.

Sequence similarities

Belongs to the flavoprotein pyridine nucleotide cytochrome reductase family.

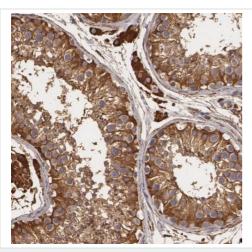
Contains 1 FAD-binding FR-type domain.

**Cellular localization** 

Endoplasmic reticulum membrane. Mitochondrion outer membrane and Cytoplasm. Produces the

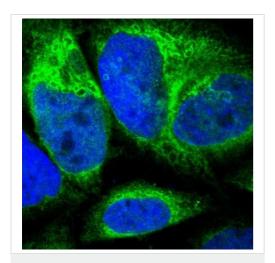
soluble form found in erythrocytes.

## **Images**

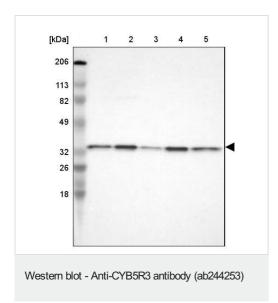


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CYB5R3 antibody (ab244253)

Formalin-fixed, paraffin-embedded human testis tissue stained for CYB5R3 with ab244253 at a 1/1000 dilution in immunohistochemical analysis.



Immunocytochemistry/ Immunofluorescence - Anti-CYB5R3 antibody (ab244253) PFA fixed, Triton X-100 permeabilized A431 (Human epidermoid carcinoma cell line) cells labeling CYB5R3 using ab244253 at 4  $\mu$ g/ml (green) in ICC/IF.



All lanes: Anti-CYB5R3 antibody (ab244253) at 0.4 µg/ml

Lane 1: RT4 (Human urinary bladder cancer cell line) cell lysate

Lane 2: U-251 MG (Human brain glioma cell line) cell lysate

Lane 3: A431 (Human epidermoid carcinoma cell line) cell lysate

Lane 4: Human liver tissue lysate

Lane 5: Human tonsil tissue lysate

Predicted band size: 34 kDa

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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